

A REPORT ON THE FINANCIAL PERFORMANCE OF DOMESTIC AND FOREIGN BANKS IN INDIA USING CAMEL FRAMEWORK

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Abstract

The growth and stability of commercial banking is essential for the economy of any nation. The Reserve Bank of India states that the banking industry of India is adequately capitalized and very well regulated. There are 27 public sector banks, 21 private sector banks and 49 foreign banks in India in addition to the various cooperative and regional banks. This study is conducted to compare the performance of the domestic and foreign banks in India. The sample size is two domestic banks and two foreign banks viz. The State Bank of India, ICICI Bank, Standard Chartered Bank and HSBC Bank. The financial data available of these banks for the past 5 years have been used to conduct this study. CAMEL framework is the main tool used for the study while ANNOVA has been used for testing the various hypotheses.”

Keywords: Domestic banks, foreign banks, non-performing assets, capital adequacy, asset quality, liquidity, management quality, earnings quality

1. Introduction:

Financial Sector is the spine of the economy of any nation. It is a facilitator to accomplish continued economical development. A solid financial framework supports investment by financing beneficial business openings, effective allotment of assets and makes simple the exchange of products and services.”

“In the early 1990s India adopted a new economic policy for the development of the state. This move towards liberalization together with the rapid economic growth in India, re-energized the banking sector in India. The Indian banking sector has overseen rapid growth with strong contribution from all sector of banks – government banks, private banks and foreign banks.”

“In the following paper, utilizing the most present information available, three ownership groups of banks working in India; viz. publicly owned domestic banks (PUODs), privately owned domestic banks (PRODs) and outside foreign owned banks (FOBs) are evaluated for their profitability. Applying key profitability ratios to evaluate the profitability of these three gatherings of banks, the study look to find the bank with the best financial health.”

“This study is conducted to analyze the financial performance of the banks over the years in India. The review is based on a bank-level panel data on financial statements by gathering data with the major balance sheet and income statement for domestic and foreign banks in India from 2014-18.”

2. Review of Literature:

(Smita Ramakrishna, 2014) “states that the stability and viability of commercial banking is critical for economic growth and development. Non-performing asset management is a fundamental feature to ensure that profitability isn’t undermined.”

(Silva & Natarajan, 2011) observationally tested the applicability of CAMEL standards and its considerable effect on the performance of SBI Groups. The examination stated that yearly CAMEL analysis encourages the commercial bank to analyze its financial wellbeing and caution the bank to make preventive strides for its manageability

(Singh & Kohli, 2006) “In this study, they identify the cause of better performance as the use of technology and predicted greater scope of mergers.”

(K.K.Siraj & Pillai, 2010) “provided a survey of the efficiency of NPA management by Indian commercial banks. They highlighted that Nationalized Banks rank better than Foreign Banks and Private Sector Banks.”

(Prasad & Veena, 2011)“The study showed a decrease in NPA indicates that banks have improved their credit appraisal processes over the years while an increase indicates a lowering of profitability.”

(Rawlin, 2012)“observed that that there is a strong correlation between Gross Advances and NPA of banks and that NPA can be predicted based on its relationship with Gross advances.”

(Pandya, 2014) stated that foreign banks have played an important role in the Indian economy, especially in the priority sectors. Globalization has constrained the banking division to connect with more clients so as to extend their business.

(Chaudhary & Singh, 2012)broke down the effect of the financial changes on the soundness of Indian Banking through its effect on the asset quality. The examination distinguished the key players as risk management, NPA levels, cost administration and financial consideration

(Gupta, 2008) concluded that SBI and its associates have the highest efficiency, followed by private sector banks, and the other nationalized banks.

3. Objectives:

- To compare the performance of both the categories of banks over last 5 years.
- To study about the level of Non performing assets of the sample banks.
- To study the overall financial position of Indian and Foreign banks through CAMEL analysis.

4. Research Methodology:

4.1 Statement of Problem

“In the early 1990s' India adopted a new economic policy for the development of the state. This move towards liberalization together with the rapid economic growth in India, re-energized the banking sector in India. The Indian banking sector has overseen rapid growth with strong contribution from all sector of banks – government banks, private banks and foreign banks. This study is conducted to analyze the financial performance of the banks over the years in India. The review is based on a bank-level panel data on financial statements by gathering data with the major balance sheet and income statement for domestic and foreign banks in India from 2014-18.”

4.2 Research Questions

- How would the profitability be determined for different banks?
- What is NPA? The effects of NPA over the profitability of banks.
- What is CAMEL analysis?
- How is CAMEL helpful to find the financial position of the banks?

4.3 Research Tool

“CAMEL is a ratio-based model used to evaluate the performance of banks with the help of different criteria, viz. Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity. The present study is a descriptive research study based on analytical research design.”

4.4 Method of Research

SAMPLING- 2 domestic banks and 2 foreign banks are taken for the study.

4.5 Data Collection

Secondary Sources:

1. Financial Statements
2. Business journals
3. Reports from Reserve Bank of India

4.6 DATA ANALYSIS

The tool that has to be used for the interpretation of the data will be through CAMEL analysis also different tests would be conducted to check the viability and relevance of the study.

4.7 LIMITATIONS OF THE STUDY

- The study is based on selected criteria only.
- The companies chosen for the study are two domestic banks and two foreign banks whereas the the total of them are larger in number.
- The study is based only on secondary data sources.

5. Analysis:

Tools For data Analysis

The tool that has to be used for the interpretation of the data will be through CAMEL analysis also different tests would be conducted to check the viability and relevance of the study.

“The various components of the CAMELS rating model in the form of financial ratios are described as below”:

1.Capital Adequacy

“Capital adequacy is assumed to be a crucial reflector of the financial soundness of a bank. In order to survive, it is indispensable to protect the stakeholder confidence and preventing its bankruptcy.”

Capital Adequacy							
Total Debt/Equity Ratio							
BANK	2018	2017	2016	2015	2014	AVERAGE	RANK
State Bank Of India	0.06	0.06	0.07	0.07	0.06	0.064	1
ICICI Bank	0.06	0.06	0.06	0.07	0.07	0.064	1
Standard Chartered Bank	1.31	1.34	1.48	1.80	2.15	1.616	4
HSBC Bank	0.44	1.30	0.67	1.22	1.32	0.99	3

It measures the ability of a bank in absorbing losses arising from risk assets. The lower is the ratio the better would be the capital structure of the bank. In this case, State Bank of India and ICICI Bank are the best performers with an average of 0.064”

2.Assets Quality

“The quality of credit portfolio expresses the profitability of banks. The major concern of all commercial banks is to keep the amount of non-performing loans to low level. This is so because high non-performing loan affects the profitability of the bank.”

Asset Quality							
Net NPA/Net Advances (%)							
BANK	2018	2017	2016	2015	2014	AVERAGE	RANK
State Bank Of India	6	4	4	2	3	3.8	4
ICICI Bank	5	5	3	2	1	3.2	3
Standard Chartered Bank	3.5	4	2	3	1	2.7	1
HSBC Bank	5	3.5	3	2	2	3.1	2

Net NPA/Net Advances indicates the level of non performing assets in the net advances made. The lower is the ratio the better it is for the Bank. In this case, Standard Chartered Bank is the best performer with the lowest average NPA of 2.7

3.Management Efficiency

Management efficiency is another indispensable constituent of the CAMELS model that guarantees the growth and endurance of a bank.

MANAGEMENT Efficiency								
Total Advances/Total Deposit ratio		2018	2017	2016	2015	2014	AVERAGE	RANK
BANK		2018	2017	2016	2015	2014	AVERAGE	RANK
State Bank Of India		0.71	0.76	0.84	0.82	0.86	0.798	3
ICICI Bank		0.91	0.94	1.03	1.07	1.02	0.994	1
Standard Chartered Bank		0.76	0.85	0.88	0.93	0.94	0.872	2
HSBC Bank		0.55	0.53	0.62	0.54	0.56	0.56	4

This ratio indicates the ability of a bank to convert its deposits into higher earning deposits. The higher is the ratio the better is the functioning of the bank in terms of management. In this case, ICICI bank is ranked as 1 as it has the highest average of 0.994.

4.Earning Quality

It primarily reflects the profitability of bank and enlightens consistency of future earnings

EARNING QUALITY								
Return on Asset(%)		2018	2017	2016	2015	2014	AVERAGE	RANK
BANK		2018	2017	2016	2015	2014	AVERAGE	RANK
State Bank Of India		-0.18	0.38	0.42	0.63	0.60	0.37	4
ICICI Bank		0.77	1.26	1.34	1.72	1.64	1.346	3
Standard Chartered Bank		1.37	1.68	0.77	2.31	1.2	1.466	1
HSBC Bank		1.60	1.83	1.37	1.18	1.13	1.422	2

This ratio indicates the returns earned on assets deployed by the bank. Higher the return on assets higher is the bank's earning quality. In this scenario, Standard Chartered has the best earning quality with an average of 1.466.

5.Liquidity

Liquidity is another noteworthy aspect which expresses the financial performance of banks. Liquidity means the ability of the bank to honor its obligations toward depositors.

LIQUIDITY								
Cash Asset/Total Asset (%)		2018	2017	2016	2015	2014	AVERAGE	RANK
BANK		2018	2017	2016	2015	2014	AVERAGE	RANK
State Bank Of India		4.35	4.7	5.7	5.65	4.74	5.028	1
ICICI Bank		3.76	4.1	3.76	3.97	3.66	3.85	2
Standard Chartered Bank		2.70	2.67	2.4	3.33	3.05	2.830	4
HSBC Bank		2.97	2.79	2.48	3.1	2.82	2.832	3

This ratio measures cash (which has the highest liquidity and safety among all assets) as a proportion of total assets. Banks prefer to have higher liquidity ratios. In this case, State bank of India is having the best liquidity position with an average of 5.028.

HYPOTHESIS

H01: There is no significant difference between public, private sector, & foreign bank's Capital Adequacy.

H02: There is no significant difference between public, private sector, & foreign bank's Asset quality.

H03: There is no significant difference between public, private sector, & foreign bank's Management quality.

H04: There is no significant difference between public, private sector, & foreign bank's Earnings ability.

H05: There is no significant difference between public, private sector, & foreign bank's Liquidity.

TESTING OF HYPOTHESIS

Anova: Single factor

Analysis of variance or ANOVA can be used to compare the means between two or more groups of values.

1. CAPITAL ADEQUACY

SUMMARY				
Groups	Count	Sum	Average	Variance
State Bank of India	5	0.32	0.064	3E-05
ICICI Bank	5	0.32	0.064	3E-05
Standard Chartered Bank	5	8.08	1.616	0.12683
HSBC Bank	5	4.95	0.99	0.1657

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	8.655295	3	2.885098333	39.44220012	1.27909E-07	3.238871517
Within Groups	1.17036	16	0.0731475			
Total	9.825655	19				

INTERPRETATION:

The Comprehensive table shows the results of ANOVA for Capital Adequacy. As we can see the F value is greater than the F crit value which states that we can reject the Null Hypothesis i.e. there is no significant difference in the performance of banks based on capital adequacy). So, there is a significant difference among banks.

2. Asset Quality

SUMMARY				
Groups	Count	Sum	Average	Variance
State Bank Of India	5	19	3.8	2.2
ICICI Bank	5	16	3.2	3.2
Standard Chartered Bank	5	13.5	2.7	1.45
HSBC Bank	5	15.5	3.1	1.55

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.1	3	1.033333333	0.492063492	0.692764618	3.238871517
Within Groups	33.6	16	2.1			
Total	36.7	19				

Interpretation:

The Comprehensive table shows the results of ANOVA for Asset Quality. As we can see the F value is greater than the F crit value, we can reject the Null Hypothesis i.e. there is no significant difference in the performance of banks based on asset quality. So, there is a significant difference among banks.

3. Management Efficiency

SUMMARY				
Groups	Count	Sum	Average	Variance

State Bank Of India	5	3.99	0.798	0.00382
ICICI Bank	5	4.97	0.994	0.00443
Standard Chartered Bank	5	4.36	0.872	0.00527
HSBC Bank	5	2.8	0.56	0.00125

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.5014	3	0.167133333	45.26292033	4.84418E-08	3.238871517
Within Groups	0.05908	16	0.0036925			
Total	0.56048	19				

Interpretation:

The Comprehensive table shows the results of ANOVA for Management Efficiency. As we can see the F value is greater the F crit value, we can reject the Null Hypothesis i.e. there is no significant difference in the performance of banks based on Management Efficiency. So, there is a significant difference among banks.

4. Earning Quality

SUMMARY				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
State Bank Of India	5	1.85	0.37	0.1064
ICICI Bank	5	6.73	1.346	0.14138
Standard Chartered Bank	5	7.33	1.466	0.33063
HSBC Bank	5	7.11	1.422	0.08617

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	4.10326	3	1.367753333	8.232287058	0.001536265	3.238871517
Within Groups	2.65832	16	0.166145			
Total	6.76158	19				

Interpretation:

The Comprehensive table shows the results of ANOVA for Earning Quality. As we can see the F value is greater the the F crit value, we can reject the Null Hypothesis i.e. there is no significant difference in the performance of banks based on Earnings. So, there is a significant difference among banks.

5. Liquidity

SUMMARY				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
State Bank Of India	5	25.14	5.028	0.37217
ICICI Bank	5	19.25	3.85	0.0323
Standard Chartered Bank	5	14.15	2.83	0.13145
HSBC Bank	5	14.16	2.832	0.05417

ANOVA						
<i>Source of</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>

Variation						
Between Groups	16.39754	3	5.465846667	37.05093573	1.97757E-07	3.238871517
Within Groups	2.36036	16	0.1475225			
Total	18.7579	19				

Interpretation:

The Comprehensive table shows the results of ANOVA for Liquidity. As we can see the F value is greater than the F crit value, we can reject the Null Hypothesis i.e. there is no significant difference in the performance of banks based on liquidity. So, there is a significant difference among banks.

The empirical results show that there is a statistically significant difference between the CAMEL ratios of the selected Domestic Banks and Foreign Banks in India

Summary Of Findings

Composite Ranking: Overall Performance

NAME OF BANK	C	A	M	E	L	Avg	Rank
State Bank Of India	1	4	3	4	1	2.6	3
ICICI Bank	1	3	1	3	2	2	1
Standard Chartered Bank	4	1	2	1	4	2.4	2
HSBC Bank	3	2	4	2	3	2.8	4

For the time period of 5 years i.e. From FY 2014-FY2018:

1. There is significant difference in the performance of the sample banks.
2. ICICI Bank has the best performance among the sample banks.
3. On the basis of CAR, on average, SBI and ICICI Bank have shown the best results by having the lowest Debt/Equity ratio. This shows that old public sector banks are taking high risk as compared to new private sector banks and foreign banks.
4. When the growth rate of Net NPA to Net advances is considered it shows that foreign banks are managing their non performing assets more efficiently as compared to Indian banks. In context of asset quality and management efficiency Standard Chartered bank is the best performer.
5. On the basis of Return on Assets, it is found that Standard Chartered has shown the most positive growth in the previous years. It is also found that growth rate of most public and old private sector banks are negative. It is also found that average return on assets of new private sector banks is highest among all bank groups while SBI and associates have lowest return on assets among all banks groups. The study shows that performance of Foreign Banks is much better than Indian banks. Standard Chartered is the best performer under earnings context.

6. Conclusion and Recommendations:

CAMEL analysis is an essential measure to survey the relative financial health of a bank and to recommend reasonable measures to improve its shortcomings. In the present paper, CAMEL positioning methodology is issued to survey relative performance of chosen Indian and Foreign banks. The study reveals that there is noteworthy contrast between the mean values of CAMEL ratios of Indian and Foreign banks.

Recommendations:

1. Deposits and credits are main components of every bank. Most of the portion of income and expenditure are dependent upon these components. Therefore, banks should give more importance to enhance deposits. Financial inclusion can be helpful to increase deposits and credits.

2. Credit is also helpful in generating interest income and profits. The banks though should not ignore liquidity, solvency and profitability at the time of giving loans.
3. High level of NPAs is the most crucial challenge faced by India banking system. To tackle this problem, different options are available which would include:
 - I. Reducing the existing NPAs and curbing their further build up
 - II. Exploring avenues of recovering NPAs such as Lok Adalats for recovering smaller loans.
4. Banks should look to improve risk profiling by allotting Unique Customer Identification Code for customers who will help to identify a customer, track the facilities availed of, monitor financial transactions in various accounts.
5. Due to innovation in information technology, internet facility, telebanking, mobile banking has increased the efficiency of banks. But at the same time these technological facilities have some drawbacks like online frauds, password hacking etc. Therefore, the banks should improve the quality of these services and pay more attention for the safety of customers' money and personal information.
6. It's a banks duty to aware the customers about new facilities and provide workshops, online study material etc. from time to time to how these facilities can be used carefully and safely

References

- Gupta, B. (2012) A Comparative Study of Non-Performing Assets of SBI and Associates and Other Public Sector Banks, Retrieved from SIT Journal of Management, Vol. .No. 2. December 2012.
- Dash, M. and Das, A. (2009), A CAMELS Analysis of the Indian Banking Industry, Social Science Research Network paper no. 1666900. <http://www.ssrn.com/>
- Srinivas, K. and Saroja, L. (2013), Comparative Financial Performance of HDFC Bank and ICICI Bank, Scholars World-International Refereed Multidisciplinary Journal of Contemporary Research, 1(2), pp.107-112.
- Tripathi, D. and Meghani, K. (2014), Financial Performance of Axis Bank and Kotak Mahindra Bank in the Post Reform Era: Analysis on CAMEL Model, International Journal of Business Quantitative Economics and Applied Management Research, 1(2), pp.108-141.
- Prasad, K.V.N and Chari, A.A. (2011), Financial Performance of Public and Private Sector Banks: An Application of Post Hoc Tukey HSD Test, Indian Journal of Management Sciences, 2(5), pp.79-92.
- Baral, K.J. (2005), Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal, The Journal of Nepalese Business Studies, 2(1), pp.41-55.
- Kwan, S. and Eisenbeis, R. (1997), Bank Risk, Capitalization and Operating Efficiency, Journal of Financial Services Research, 12(2/3), pp.117-131.
- Smita Ramakrishna, R. K. (2014). COMPARATIVE STUDY OF FOREIGN BANKS AND PUBLIC SECTOR BANKS WITH REFERENCE TO NON-PERFORMING ASSETS. National Monthly Refereed Journal of Research In Commerce & Management.
- Silva, S., & Natarajan, P. (2011). Camel rating scanning (CRS) of SBI groups. Journal of Banking Financial Services and Insurance Research.
- Singh, D., & Kohli, G. (2006). Evaluation of Private Sector Banks in India. Journal of Management Research.